ABSTRACT

[1072] Techniques for detecting and mitigating adjacent channel interference (ACI) in a wireless (e.g., CDMA) communication system. In one aspect, ACI may be determined by signaling or detected by filtering a pre-processed signal in each frequency range where ACI may be present (e.g., with a respective bandpass filter), estimating the energy of the filtered signal for each frequency range, comparing the estimated energy against an ACI threshold, and indicating the presence or absence of ACI at each frequency range based on the result of the comparison. In another aspect, a selectable filter (e.g., a FIR filter) having a number of possible filter responses (e.g., provided by a number of sets of filter coefficients) may be used to provide filtering for the pre-processed signal and to reject any detected ACI. One of the possible filter responses is selected for use depending on whether and where ACI has been detected.